

**Current Issues in Education:**  
**Trends, Views and Analysis**



**A Book in Honour of**  
**PROFESSOR ADAMS OTUOZE UMORU ONUKA**

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## FOREWORD

This intensively knowledge-packed and highly invaluable volume is a befitting recognition of the academic/professional pursuit of a respected and highly distinguished colleague, who has devoted quality time and energy to the pursuit of academic excellence in all its dimensions, and with specific reference to the field of Educational Evaluation. The book presents high quality, original contributions by old students, mentees, and close associates of Distinguished Professor (Venerable) Adams Onuka on Theory and Practice of Educational Evaluation, logically complemented by frontline research papers on the same subject.

The Theory and Practice papers serve as both a recall and an update on the basics of the discipline. They remind us of what we already know and go further to update us on emerging developments in practice-enriched and research-induced thinking on the subject. On the other hand, the numerous research reports familiarise us with ever-growing methodological highlights in research in the field of concern to the volume. They go a step further to expand and deepen the scope of our knowledge through straightforward expositions on new research findings (gleaned from work carried on in Nigeria, and in recent years) on the subject.

This is a book that cannot be simply glanced-through-and-dumped. It is one that induces the reader to further in-depth thinking, continued knowledge sharing, revolutionary re-thinking, and incitation to further research. Every one of the Theory and Principles contributions goes from being a simple narrative to engaging the reader in questioning for possible rethinking. In like manner, the research-based papers have gone beyond mere reporting to raising issues with well-accepted theories and highlighting new focus areas for further probing through carry-it-on-from-here research.

These are the qualities that make the work both a *textbook* (for students) and a *guidebook* (for the researcher/practitioner). While the former would reap a rich harvest of up-to-date material for effective initiation into the field, the latter would operate with the self-confidence that comes with being armed with insight garnered from familiarity with ground-breaking research in one's field of specialisation.

I salute the worthy initiative and the hard work of the Editors in packaging this rich and extremely valuable volume. To the worthy contributors, I say 'keep up with the good work so well begun', and to Distinguished Professor (Venerable) Adams Onuka, may I remind him that *you do NOT retire from Education*, as your new age is simply the beginning of a call to RE-FIRE.

**Emeritus Professor Pai Obanya**

April 2022

## PREFACE

When a man deserves an honour, it is better given to him in time. This is why this festschrift is being put together to give honour to a man of honour and virtue, a teacher of teachers whose teaching experience transcends all facets of spiritual landscape, education and administration. All these were demonstrated during his headship in the Chapel of the resurrection, Institute of Education, the Centre for Social Orientation, University of Ibadan, Nigeria at different times for three decades. Professor Adams Otuoze Umoru Onuka is a Professor of Educational Research/Management, Measurement and Evaluation and has written extensively in all facets of his field of specialisations. He has mentored many of his colleagues both within and outside of the Institute of Education. He has also successfully supervised hundreds of students at Master and Doctoral levels. These reasons and many more prompted his friends, colleagues, students (current and those who have successfully graduated) to put this piece together to honour him.

This book is a compendium of topics in "Current issues in Education: Trends, Views and Analysis". It covered issues in 'Public examining', 'Educational Assessment', 'Education and ICT', Management and Quality Assurance, Research methodological issues and Education and development. The topics under public examining include 'Examination Malpractice: Contemporary Realities and Antidotes' by the erudite international education master strategist and Emeritus Professor in the Institute of Education, University of Ibadan, Professor P. A. I. Obanya; Reliability of the Threats to Examination Integrity and Ways of Overcoming Them by Joseph AMEH, Kwanza M. ALLAHNANA and Martina Taiwo AKANDE and Role of Public Examining Bodies in Curriculum Development in Nigeria Senior Secondary School System by Benson Adesina ADEGOKE.

Papers that discussed assessment issues include 'Assessment in Early Years' by Monica Ngozi Odinko; Assessment of Work Skills of Workers In Nigerian Tertiary Institutions Pre and Post Covid-19 Pandemic put together by Foluso A. AROWOJOLU, Deborah A. OYEGOKE and Mosunmola A. AMUSAN; Weak Measurement Data in Education and Psychology: Pitfall to Right Decision Making by Olufemi Abiodun AJAYI and Abiodun Adebowale OJO; Assessing the Quality of English Achievement Items of Senior Secondary One Students in Lagos State Using Factor Analysis by Blessing Nnenna Ilogu; Assessment of Learning Performance of Junior Secondary School 3 Students' Mathematics in Rivers State by V. A. ASURU and Isabella Oju IYALLA; Moderation of School Based Assessment by Olayemi Oyenike OSHIN and Assessment of Students' Research Statement of Problem of Research Projects in the Faculty of Education, Niger Delta University, Bayelsa State by Veronica Odiri AMATARI.

Other scholarly works written in this area include Exploring The Advancement of Modern Test Theories in Educational Assessment Procedures by Babatunde Kasim OLADELE and Olutayo Toyin OMOLE; Assessment of the Interface of Job Stress and Job Effectiveness among University of Ibadan Academics by Titilope A. ODERINWALE and Hannah B. OGUNRINDE; Formative and Summative Assessments in Education by Martina Taiwo AKANDE; Assessment for Institutional Quality and Improvement by E. Adenike EMEKE; Testing: Origin, Types, Characteristics, Usage and Implication in Language Arts by James E. UBA, Ogar-Kanebe Nsor UBA & U. Charity-Ogbebor KIGHO; Regaining Tiv Indigenous Knowledge through Indigenised Education System and Assessment Frameworks in The Era of New Normal by Terhembra Godwin AT SUA and School Type, Professional Status and Continuous Assessment Practice among Secondary School Teachers in Port Harcourt Local Government Area of Rivers State by Esther T. BRUCE-AGBOGIDI.

Interesting works discussed under Education and ICT' include Influence of Homestay, Socio-Economic Status and Computer Literacy on Undergraduates' Learning Attitude During

Covid-19 Pandemic in the University of Ibadan by Ikmat O. JUNAID and Mojisola Bridget OLADEJO; Electronic Board for Effective Teaching and Learning for Sustainable Education System in Nigeria by Sunday Nnamdi OKOCHA; Things to Know Before Embarking on Data Analysis by A. T. ONABAMIRO; Maximising the Synergy between Reference Management Software (and Computer-Assisted Qualitative Data Analysis Software for Literature Review by Abiodun I AGUNBIADE and The Flipped Pedagogical Approach in Science and Technology Classroom: Students' Metacognitive Skills in Emmanuel Alayande College of Education, Oyo by Abiodun Ezekiel ADESINA.

Other areas covered include Management and Quality Assurance matters. The topics discussed around this are Principals' Management Skills and Personal Characteristics as Predictors of Secondary School Teachers' Job Performance in Ibadan by Esther O. DUROWOJU & T. F. AKINYEMI; Quality Assurance in Education: The Essence of Monitoring by Gordon Okpale EKPUYAMA; Quality of Healthcare Services Under The National Health Insurance Scheme in Federal Universities in The South-West, Nigeria 2009 – 2018 by Suraju Ajibola ADEYEMI and Impact of Supervision on Teachers' Efficiency in Junior Secondary Schools in Ogun East Senatorial District, Ogun State by Kassim O. AJAYI, Abiodun A. OJO & Kehinde O. MURAINA.

Issues on Education and development were not left out. Scholarly topics discussed under this area are Resourceful Science Teaching and Learning for Sustainable Development in Nigeria by Abed Chibuzo KANU and M. J. ADEJOH; Basic Education: An Approach to Resolving Herders-Farmers Conflicts in Nigeria by Modupe M. OSOKOYA, Moshood Abiodun JIMOH and Jamii Abiodun ADEBAYO; Care Nurturing: An Impetus to Healthy Livelihood by Felicia Mayokun ODUNTAN; Gender and Academic Qualification as Predictors of University Graduate Employability in Uyo Town, Akwa Ibom State, Nigeria by Monica N. ODINKO & Miriam U. JAMES; Parental Practices as Predictors of Secondary School Student's Performance in Vocational and Technical Education in Rivers State, Nigeria by Kehinde Victoria IKOKIDE and Home Factors as Determinants of The Completion of Basic Education in South West Nigeria by M. Bola ONI

Some of the contributors focused their attention on research technicality issues. Topics covered in this area include Level of Measurement, Reliability, Correlation Estimates and Factor Analysis of Psychological Tests by Benson Adesina ADEGOKE; Intra-Class Correlation Coefficient (Icc) as A Measure of Reliability in Educational Research by Babajide Mike BAKARE (Jnr) et al; Research: Population, Sample and Sampling Techniques by Wasiu Olayide LAWAL

It is worthy to note that the honoree Professor A. O. U. Onuka in collaboration with his mentees, past and present students wrote some chapters in this book. Some of such stimulating topics include Corruption and National Development by A. O. U. ONUKA & Onyeka N. OJIGBO-OJAIVBO; The Use of ICT among Secondary School Teachers: A Panacea for Educational Development by Alice Ekundayo OLATUNJI and A.O.U. ONUKA; Portfolio Assessment Method and Secondary School Students' Soft Skills Development in Economics in Oyo South Senatorial District, Oyo State, Nigeria presented by Professor A.O.U. ONUKA and Dr. Nkembuchukwu I. ADEYEMI-ADEWOYIN. The collection of papers in this book will no doubt serve as a good reading textbook in the area of focus.

**Monica N. Odinko**

## ACKNOWLEDGEMENTS

Having an idea and turning it into a book is as hard as it sounds. The experience is both internally challenging and rewarding. I especially want to thank the individuals that helped make this happen. Complete thanks to all the contributors. Although this period in our country is filled with many ups and downs yet we were able to finance this book project and let it come to fruition. You all are indeed good friends to the HONOREE! Emeritus Professor P.A.I Obanya, thank you for being a father figure and for coming to our aid whenever consulted.

Without the experiences and support from my colleagues and team of peer reviewers, this book would not exist. You have given me the opportunity to lead a great group of individuals. Special thanks to Dr Oladele, for being ever-patient with the contributors and Sunday, for helping in the formatting of the submissions. Thank you to Dr. Babatunde for your unflinching support.

Finally, I thank God most of all, because without God we wouldn't be able to accomplish this.

## CONTENTS

Pai OBANYA	Examination Malpractice: Contemporary Realities and Antidotes .....	1
Monica Ngozi ODINKO	Assessment in Early Childhood.....	13
Foluso Agnes AROWOJOLU; Deborah Adepeju OYEGOKE & Mosunmola Adebunmi AMUSAN	Assessment of Work Skills of Workers in Nigerian Tertiary Institutions Pre and Post Covid-19 Pandemic.....	23
Olufemi Abiodun AJAYI & Abiodun Adebowale OJO	Weak Measurement Data in Education and Psychology: Pitfall to Right Decision Making .....	35
Blessing Nnenna ILOGU	Assessing the Quality of English Achievement Items of Senior Secondary One Students in Lagos State Using Factor Analysis .....	41
Veronica Odiri AMATARI	Assessment of Students' Research Statement of Problem of Research Projects in the Faculty of Education, Niger Delta University, Bayelsa State.....	50
Nkembuchukwu I. ADEYEMI-ADEWOYIN & A.O.U. ONUKA	Portfolio Assessment Method And Secondary School Students' Soft Skills Development in Economics in Oyo South Senatorial District, Oyo State, Nigeria .....	57
Ikmat O. JUNAID & Mojisola Bridget OLADEJO	Influence of Homestay, Socio-Economic Status and Computer Literacy on Undergraduates' Learning Attitude During Covid-19 Pandemic in the University of Ibadan .....	69
Gordon Okpole EKPUYAMA	Quality Assurance in Education: The Essence of Monitoring .....	81
Abiodun Ezekiel ADESINA	The Flipped Pedagogical Approach in Science and Technology Classroom: Students' Metacognitive Skills in Emmanuel Alayande College of Education, Oyo.....	93
Esther O. DUROWOJU & T. F. AKINYEMI	Principals' Management Skills and Personal Characteristics as Predictors of Secondary School Teachers' Job Performance in Ibadan.....	106
A. T. ONABAMIRO	Things to Know Before Embarking on Data Analysis.....	115
Titilope A. ODERINWALE & Hannah B. OGUNRINDE	Assessment of the Interface of Job Stress and Job Effectiveness among University of Ibadan Academics .....	130
Martina Taiwo AKANDE	Formative and Summative Assessments in Education.....	141
Abed Chibuzo KANU & M. J. ADEJOH	Resourceful Science Teaching and Learning for Sustainable Development in Nigeria .....	155
Benson Adesina ADEGOKE	Level of Measurement, Reliability, Correlation Estimates and Factor Analysis of Psychological Tests .....	163



Current issues in Education: Trends, Views and Analysis

Felicia Mayokun ODUNTAN	Care Nurturing: An Impetus to Healthy Livelihood .....	176
Babatunde Kasim OLADELE & Olutayo Toyin OMOLE	Exploring The Advancement Of Modern Test Theories in Educational Assessment Procedures.....	188
Modupe M. OSOKOYA Moshood Abiodun JIMOH & Jamiu Abiodun ADEBAYO	Basic Education: An Approach to Resolving Herders- Farmers Conflicts in Nigeria .....	201
Kehinde Victoria IKOKIDE	Parental Practices as Predictors of Secondary School Student's Performance in Vocational and Technical Education in Rivers State, Nigeria .....	208
Esther T. BRUCE-AGBOGIDI	School Type, Professional Status and Continuous Assessment Practice among Secondary School Teachers in Port Harcourt Local Government Area of Rivers State .....	218
Babajide Mike BAKARE (Jnr) Olabosede V. BAKARE (Jnr) & Oluwabunmi D. BAKARE	Intra-Class Correlation Coefficient (ICC) as A Measure of Reliability in Educational Research.....	227
Wasiu Olayide LAWAL	Research: Population, Sample and Sampling Techniques.....	244
O. U. ONUKA & Onyeka N. OJIGBO-OJAIVBO	Corruption and National Development.....	253
V. A. ASURU & Isabella Oju IYALLA	Assessment of Learning Performance of Junior Secondary School 3 Students' Mathematics in Rivers State.....	270
Monica N. ODINKO & Miriam U. JAMES	Gender and Academic Qualification as Predictors of University Graduate Employability in Uyo Town, Akwa Ibom State, Nigeria .....	279
Sunday Nnamdi OKOCHA	Electronic Board for Effective Teaching and Learning for Sustainable Education System in Nigeria .....	287
Olayemi Oyenike OSHIN	Moderation of School Based Assessment .....	298
M. Bola ONI	Home Factors as Determinants of The Completion of Basic Education in South West Nigeria .....	307
James E. UBA Ogar-Kanebe Nsor UBA & U. Charity-Ogbebor KIGHO	Testing: Origin, Types, Characteristics, Usage and Implication in Language Arts .....	316
Kassim O. AJAYI, Abiodun A. OJO & Kehinde O. MURAINA	Impact of Supervision on Teachers' Efficiency in Junior Secondary Schools in Ogun East Senatorial District, Ogun State .....	326
Alice Ekundayo OLATUNJI & A.O.U. ONUKA	The Use of ICT among Secondary School Teachers: A Panacea for Educational Development.....	333

**Current issues in Education: Trends, Views and Analysis**

Joseph AMEH, Kwanza M. ALLAHNANA & Martina Taiwo AKANDE	Reliability of the Threats to Examination Integrity and Ways of Overcoming Them.....	343
E. Adenike EMEKE	Assessment for Institutional Quality and Improvement.....	354
Benson Adesina ADEGOKE	Role of Public Examining Bodies in Curriculum Development in Nigeria Senior Secondary School System.....	365
Suraju Ajibola ADEYEMI	Quality of Healthcare Services Under The National Health Insurance Scheme in Federal Universities in The South-West, Nigeria 2009 – 2018.....	375
Terhemba Godwin ATSUA	Regaining Tiv Indigenous Knowledge through Indigenised Education System and Assessment Frameworks in The Era of New Normal .....	388
Abiodun I AGUNBIADE	Maximising the Synergy between Reference Management Software (and Computer-Assisted Qualitative Data Analysis Software for Literature Review .....	405

# INFLUENCE OF HOMESTAY, SOCIO-ECONOMIC STATUS AND COMPUTER LITERACY ON UNDERGRADUATES' LEARNING ATTITUDE DURING COVID-19 PANDEMIC IN THE UNIVERSITY OF IBADAN

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## **Abstract**

*It is widely known that formal learning is best experienced in the confinement of classroom environment. Educational and other related activities were mopped together because of homestay induced by COVID-19 pandemic, resulting in remote teaching-learning mode and manipulations of computers and the internet which were alien to some undergraduates and lecturers. The study therefore, examined the influence of Homestay, Socio-Economic Status and Computer Literacy on Undergraduates' Learning Attitude during Covid-19 Pandemic's Induced "Pedagogical Restructuring" in the University of Ibadan. Ex-post facto design of cross-sectional study and multi-stage sampling techniques guided the study. Five faculties, 20 departments, 30 Economics, 400 undergraduates and 30 teachers were randomly selected for the study. Three research questions and three validated instruments-Depression, Anxiety and Stress Scales ( $r = 0.85$ ), Undergraduates' Socio-Economic Status and Computer Literacy Scale ( $r = 0.75$ ), Attitude to Learning Scale ( $r = 0.70$ ), were used in the study. Data obtained were analysed using descriptive statistics and multiple regression at 0.05. Results revealed that most respondents experienced one psychological trauma during COVID-19 pandemic homestay. Further finding showed that independent variables were reliable predictors of undergraduates' attitude to learning during COVID-19 pandemic homestay ( $F_{(2, 394)} = 9.470, p < 0.005$ ). Computer literacy made the highest contribution to the students' attitude to learning ( $\beta = 1.91, t = 3.815, p < 0.05$ ), followed by experiences of the undergraduates ( $\beta = .159, t = 3.174, p < 0.05$ ). The paper recommends that the University of Ibadan management should consider the socio-economic status of its undergraduates before advancing into individual differences', sensitive educational event such as adoption of online platforms during COVID-19 pandemic.*

**Keywords:** COVID-19, Homestay, Socio-economic status, Computer literacy, Learning- attitude

## **Introduction**

The effect of COVID-19 pandemic has necessitated the shutdown of institutions and sectors for which educational sector was not left behind and now a concern to stakeholders in education on the need to meeting the expectation of 1.6 Billion children and youth out of school all over the globe in continuing their normal learning activities (Word Bank, 2020). While learners' stay at home to wait for teachers' arrival on a platform different from the classroom setting could be regarded as a progress-inhibiting issue in education, adoption of remote learning platforms for teaching-learning activities across different school districts and locations, coupled with learners of different socio-economic status, intelligence and self-efficacy in using remote learning platforms, could induce inequality in education that will be difficult to manage. Beyond the above stated bottlenecks is the tendency of effective assessment monitoring of online testing and examination of learners' achievement to remain questionable if the new normal in education is to stay.

It is projected that by the time it ends, the COVID-19 pandemic would have left an indelible mark in the history of epidemic and pandemic diseases. Studies indicate different strands of Corona viruses - the family to which COVID-19 belongs (Yin and Wunderink, 2018). However, there are marked

distinctiveness in the COVID-19 spread patterns and modes, from other species of Corona viruses. The World Health Organization (WHO, 2020) website reports at different instances that the first case of COVID-19 was discovered in the Wuhan province, China. The virus would go on spreading from there to almost all the countries of the world with 17,005,983 affected persons and 666,857 deaths ECDPC (2020, September Situation Report) as at the time of putting this study proposal together.

Walker, Whittaker and Watson (2020) reported that COVID-19 pandemic did not only cause alarming mortality among infected people, but also has its grip on other sectors of government apart from the health. The peculiar impacts of the COVID-19 pandemic are the shutting down of economy, religious gatherings, the education sector and other social institutions. It was reported that countries like China had closed her schools early enough at the outset of the pandemic in the Wuhan province in late January 2020. China instituted a nationwide lockdown forcing students' learning to be transmitted via online platforms on 17 February, 2020. By 27 April, 2020, schools were reopened to prepare students for college entrance examinations.

Basilaia and Kvanvadze (2020) reported that the situation in general education in the United States also changed in the spring semester of 2020, when the first case of COVID-19 infection was detected in Georgia, USA. This also led to the suspension of the learning process in Georgia from 2nd March by the recommendation of the Ministry of Education, Science, Culture and Sport of Georgia (MES 2020, the official statement of the Minister). The situation is similar but not the same in Africa, As UNESCO (2020) reported that Africa was the only continent where all countries have opted for a nationwide school lockdown. This situation must have affected teachers, students as well as their parents and guardians.

In South Africa, the first confirmed case of COVID-19 was recorded on 5 March, 2020. Subsequently, on 23 March, 2020, President Ramaphosa instituted a national lockdown that lasted for 21 days from 26 March, 2020 to 16 April, 2020 which was further extended due to the inability to manage the situation. South Africa had 196,750 cases as of Monday 6 June, 2020, which was more than 40% of all the cases reported by Africa's 54 countries. At this time, South Africa had recorded 3,199 deaths (Medical Xpress, 2020) and at least 2,121 teachers in Gauteng province, which includes Johannesburg, South Africa's largest city, were not able to return to schools as it was reported that they had underlying illnesses that would put them at higher risk should they become infected. Aljazeera's situation report on 23 July, 2020 revealed that 968 schools were closed due to outbreaks as 2,400 teachers and 1,260 learners had tested positive for COVID-19 with the 400,000 coronavirus cases nation-wide, fifth highest in the world, and more than 6,000 deaths (Aljazeera, 2020).

In Nigeria, Amzat, Aminu, Kolo, Akinyele, Ogundairo and Danjibo (2020) observed that within the first 30 days, the Nigerian Center for Disease Control (NCDC) observed that 70.0% of the individuals tested positive for COVID-19 were male, and 30.0% were female. Their ages ranged between 30 and 60 years. People aged 31-50 years were the most affected (39.0%). In addition, about 44.0% (101) of the cases were imported, some 41.0% (96) had incomplete epidemiological information and the sources of their infections were unknown. Thirty-five (15.0%) patients were known contacts of positive cases Nigerian Center for Disease Control (NCDC, 2020) – suggesting community transmission or cross-infection. Lagos State accounted for over 50% of the cases in Nigeria, followed by Abuja (20.3%) and Osun State (8.6%). Common characteristics of Abuja and Lagos include being the sites of major international airports and hubs of commercial and administrative activities in the country. Similarly, Ejigbo, the epicenter of the infection in Osun State, has many of its indigenous people working in Cote d'Ivoire and other neighboring countries that were already battling with hundreds of COVID-19 cases. When COVID-19 forced some of them to return to Nigeria, many returned positive for COVID-19. From the first index and other imported cases, there had been a continuous spread across other states through inter-state travels. During the first 30 days of COVID-19 in Nigeria, the disease distribution was elitist. Majority of those who tested positive were returnees from abroad (NCDC, 2020).

**Table 1: Timeline of Coronavirus Outbreak in Nigeria (February 27 - June 7, 2020).**

Incidence of Coronavirus February 27 – March 27, 2020 (the first 30 days)		
	Number	Percentage
Total positive cases	81	
Total discharged	3	3.7% (of positive cases)
Total deaths	1	1.2% (of positive cases)
Incidence of Coronavirus February 27 – April 27, 2020 (first 60 days)		
Total positive cases	1337	12.2% (of the total tests)
Total discharged	255	19.2% (of positive cases)
Total deaths	40	3.0% (of positive cases)
Total tested	10,918	
Incidence of Coronavirus February 27 – June 7, 2020 (first 100 days)		
Total positive cases	12486	16.3% (of total tests)
Total discharged	3957	31.7% (of positive cases)
Total deaths	354	2.8% (of positive cases)
Total tested	76802	

*Source: Nigeria Centre for Disease Control (NCDC, 2020; Worldometer, 2020)*

Similar to what happened in South Africa, Nigeria closed down all schools at every level on 19 March, 2020 and reopened it on 6 July, 2020 for students who are in terminal classes to prepare them for “common entrance exams” in particular to terminal primary class, “Basic Education Certificate Examination” for the terminal junior secondary school students and “Senior Secondary School Certificate Examination” for the terminal secondary school students. In Nigeria, during intense COVID-19 pandemic, while in some states (specifically Oyo and Lagos states), teachers had started online and social media teaching-learning interactions with their students, some states in the North East geo-political zone were still gathering momentum. Nigeria Education in Emergencies Working Group (NEIEWG, 2020) reported that international assistance and funding will be made available for the implementation of COVID19 response activities to ensure that children were able to continue their education because of proneness of the North East geo-political zone to terrorism.

Furthermore, Amzat, Aminu, Kolo, Akinyele, Ogundairo and Danjibo, (2020) also reported that the response from higher institution stakeholders was different from the primary and secondary ones. These authors revealed that higher institutions' stakeholders were not as quickly in their reaction as in other levels of education, probably because teaching in higher education level could be ineffective through the traditional media such as television and the radio. As a result, some private higher institutions in Nigeria tuned to social platforms such as WhatsApp, zoom, Google meets and so on, to ensure that they reached out to their students while those students were still within the confines of their houses while most public higher institutions remained indifferent. Recently, due to wide spread realisation that the COVID-19 pandemic might stay longer than expected and the steering reality of its second wave, stakeholders in higher education in Nigeria opted for the migration of teaching-learning interaction from conventional classroom to the online platforms.

The University of Ibadan, upon resumption on 18 February, 2021 advanced the use of remote learning platform for teaching-learning interaction for both post and undergraduate which has led to urgent pedagogical restructuring for both lecturers and school management. Consequently, the need for students to stay at home and provide alternative means of teaching-learning interaction was fostered. Therefore, home stay during the first and second wave of COVID-19 pandemic has advanced the adoption of online platforms by different stakeholders in education. This was in reaction to the emergency shutting down of educational institutions alongside other key sectors. In addition, social gatherings of any form were discouraged, restricting most forms of formal academic and social interactions to online platforms. This “new normal” comes as a result of global and local efforts to salvage the situation by ensuring that learning continued even while learners were at home.

Arrival of “new normal” in education has brought a dramatic change in the way teachers teach and learners learn. Different countries worldwide have launched different platforms during this pandemic to sustain education activities. Online libraries, TV broadcasts, guidelines, resources, video lectures and sundry online channels were introduced in at least 96 countries to increase the coverage of school lessons to the population (Basilaia and Kvanvadze, 2020). The Ministry of Education, Science, Culture and Sport of Georgia, in cooperation with Georgian Public Broadcaster's First Channel also launched the educational project titled “Teleskola” (TV School).

In Africa, at the level of primary and secondary schools, different initiatives have been introduced to facilitate learning on television stations and the radio as a substitute for face-to-face interaction in the school. These were given different nomenclature such as “school at home” in Côte d'Ivoire “school on TV” in Cameroon, “learning at home” or “teachers' room” in Senegal, “school at home” in Togo, “school on-screen” in Benin republic (UNESCO, 2020) and various attempts were made in the South Africa as it could be seen in the Table 1 for primary, secondary and tertiary education levels. This is because the region recorded the highest level of mortality in Africa while other countries like Nigeria were gaining momentum.

**Table 2: Varieties of Learning Platforms Adopted during COVID -19 Induced Homestay**

Tools Used	Description	Connectivity	Platform	Conditions of Use	Target Group
Internet (Websites) YouTube (Most universities)	Leaners Learn on their own at home	Online	Desktop/ Laptop/ Mobile	All rights reserved	Tertiary/ primary/ secondary
Microsoft Teams	Used mainly by staff and learners in tertiary institutions to hold discussions	Online	Desktop/ Laptop/ mobile	Freemium	Tertiary
Skype	Used mainly by Staff and learners in tertiary institutions to hold discussions	Online	Desktop/ Laptop/ Mobile	Freemium/ All rights reserved	Tertiary
WhatsApp Groups	Used mainly by staff and learners in tertiary institutions to hold discussions	Online	Desktop/ Laptop mobile	All rights reserved	Tertiary
Zoom	Group discussions	Online	Desktop	Freemium	Tertiary

Source: Mhlanga and Moloi (2020) COVID-19 and the Digital Transformation of Education.

As a way of enhancing effective learning by different stakeholders and to foster inclusive education, large companies in the telecommunication industry such as Microsoft, Google, Zoom, and Slack freely made available some features of their products for free, based on request (Basilaia and Kvanvadze, 2020). At the period of intense COVID-19 pandemic lockdown, Microsoft has offered its premium version of Teams for free for six months and has lifted existing user limits. Google has also declared its enterprise video conferencing features free for the sizable number of people up to 250 participants. Zoom lifted the time limit of video calls in some countries such as China, Japan, Italy, and the US by request for effective adjustment to the “new normal” in all sectors.

However, psychological effects of homestay were not taken into consideration. In fact, learners' adjustment to the new terrain (created by staying at home and the use of remote learning platform) for learning could be a strong determinant of the extent to which learning can take place. According to Brooks, Webster, Smith, Woodland, Wessely, and Greenberg (2020), being forced to stay at home leads to negative psychological effects such as fear, frustration, anger and lack of peer

interaction. The authors reported further that negative impact of the confinement can have long-lasting effects. Hofferth and Sandberg (2001)'s study on how Americans spend their time revealed that children's learning behavior at home is different from the school. As a way of examining the influence of "new normal" on the psychological well-being of citizens in China at the early stage of the COVID-19 pandemic, Wang, Pan, Wan, Tan, Xu and Ho (2020) conducted a cross-sectional study using over 1,000 participants. The finding revealed that 53.8% of the sampled participants experienced moderate to high levels of psychological impact. The findings also revealed that depression, anxiety and stress were common psychological experiences borne from home stay as a "new normal".

In a similar cross-sectional study on the psychological impact and associated factors of the COVID-19 pandemic in Spain, Rodríguez-Rey, Garrido-Hernansaiz and Collado (2020) used 3,055 participants in Madrid, Barcelona, Vizcaya, Guadalajara and Valencia. The findings revealed that 36.6% participants showed moderate to severe psychological impact while 14.4% experienced mild psychological impact. The study also brought the psychological strains of the COVID-19 pandemic from Chinese to Spanish and then to Nigerian population to bear. The psychological effect of "new normal" brought by COVID-19 pandemic rooted in home stay and social distancing are rarely reported with respect to Nigerian particularly among youth and school children.

Not only that the home stay could induce psychological effects on students such that it could impede their learning effectiveness, it has also been argued by Cacheiro-Gonzalez, Medina-Rivilla, Dominguez-Garrido, and Medina-Dominguez (2020) that variation may exist in students' learning. Moreover, the pattern by which a teacher teaches due to the adoption of remote learning platforms for teaching during off-site/remote teaching-learning activities can be a factor too. In addition for this kind of situation, Computer literacy is the basic condition for technology learning environment. Computer literacy correlates with computer ownership, time spent using computers, and number of computer-related courses taken. Shih (2000) indicated that more hours of computer use and time online resulted in stronger computer attitudes and achievement. Shih (2000) found that junior high students with richer computer experiences displayed better computer learning attitudes and higher achievement.

Similar results have been reported; for example, students with more off-campus computer sources, Internet experience, computer learning experience, and participation in computer clubs displayed higher computer literacy levels (Al-Adwan and Smedley, 2012; Tsai, 2002). More so, success or failure of learning during pandemic induced homestay depends on the learner's attitude. Positive attitudes increase learning aspiration, atmosphere management, and activity processes. Attitude influences individual specific likes or dislikes toward matters and events. Through the process of learning, emotions and behaviors and likes and dislikes are expressed; then attitudes are formed (Wu, 1998). Attitudes affect learning interest and produce either active participation or passive resistance. Online learning attitudes result from attitudes toward computer usage, and computer usage results from attitudes toward the computer.

Historically, new technologies have always benefited those with financial capital, and those who do not will always be left behind. Unfortunately, accessibility is highly related to socio-economic status, and this is where the digital divide begins. Children who come from low-Socio-economic status households develop academic skills slower than those who are from higher SES families (Morgan, Farkas, Hillemeier, and Maczuga, 2009); primarily because poor households have less access to learning materials which promote a positive literacy environment (Bradley, Corwyn, McAdoo, Garcia and Coll, 2001). Research conducted by Institute for Fiscal Studies (IFS) and Institute of Education (IoE) from England reported that children from poorer families spend less time learning at home during the lockdown due to the lack of study spaces and online resources (Andrew, Cattán, Costa Dias et al., 2020).

Such mechanisms affect students' academic achievement based on human capital theory. The success of children coming from disadvantaged backgrounds are usually limited due to their family's status; they are confined by the restricted financial resources their families possess. The human capital

theory explains that education is a significant human capital investment, whereas the difference in children's educational achievement is predominantly caused by the difference of family educational investment (Li and Qiu, 2018). Less scientific efforts have been expended on examining the psychological impacts of students' homestay due to the COVID-19 pandemic induced "pedagogical restructuring" brought by new normal and the corresponding influence of computer literacy and social status on students' attitude to learning. Given that the outbreak started from China and its effects have spread significantly in Spain and the United States, it is noteworthy that most studies about the psychological impact of home stay brought by COVID-19 pandemic relates to Chinese, United States and Spanish populations respectively. Studies of the psychological effects of home stay, social status and computer literacy on students' attitude to learning during COVID-19 pandemic with respect to the Nigerians are scarce in literature, hence, the need for this study.

It is widely known that formal learning is best experienced in the confinement of classrooms or lecture halls. In a situation, where learning, social activities and other related activities were mopped together because of homestay induced by COVID-19 pandemic. Homestay created unprecedented effects on learners and teachers. Some of these effects include fear, loneliness, distraction, depression and lack of socialisation. The remote teaching and learning which learners were not used to and manipulation of the computer instruments which was alien to some, can make both learners and teachers to be apprehensive of learning outcomes. Most psychological theories stress the fact that learning will occur in an atmosphere where learners feel comfortable to consider new ideas and are not threatened by external factors. The advent of the COVID-19 pandemic created a new environment for learning. Most on-site schooling activities were relocated to remote/online platforms with the immediate home environment serving as a location for learning reception to help stem the possibilities of being infected by the virus. It is perceived that the shift from on-site to online mode of learning under the intense fear of potentially unsafe immediate learning environment, may create individual differences in brain functioning due to differing responses to distressing external environment.

Also, literature shows that not only do remote learning platforms create a new terrain of leaning for students. The socio-economic background couple with computer literacy of most students most especially in Nigeria where majority are not financially buoyant to procure appropriate gadgets and subscribe to network data to access online learning may be an inevitable pitfall in developing proper attitude to learning.

In addition, patterns of the COVID-19 spread have elicited successive investigations into the psychological impacts of homestay due to the COVID-19 pandemic on the affected populace in Africa. Significantly though, there exists a gaping dearth in similar scientific investigations into the psychological impact of homestay, socio-economic status and computer literacy on students' learning during the COVID-19 pandemic's "new normal" in Nigeria most especially with there was migration of teaching-learning activities from traditional classroom to online platforms. This study therefore examined influence of homestay, socio-economic status and computer literacy on undergraduates' learning attitude during the COVID-19 pandemic's induced "pedagogical restructuring" in the University of Ibadan.

### **Research Questions**

Consequent to the problem identified in this study, the following research questions were answered:

1. What are the psychological experiences of undergraduates in the University of Ibadan as a result of home stay for learning during COVID-19 pandemic's induced "pedagogical restructuring?"
2. What is the composite contribution of effects of homestay, socio-economic status, and computer literacy on undergraduates' learning attitude during COVID-19 induced pedagogical restructuring?





3. What are the relative contributions of effects of homestay, socio-economic status, and computer literacy on undergraduates' learning attitude during the COVID-19 pandemic's induced "pedagogical restructuring?"

### Methodology

The study adopted an *ex-post facto* design of cross-sectional study. This research type was chosen because the researcher does not have control over the variables as their manipulation had already occurred. The study population comprised all the University of Ibadan undergraduates that received lectures via remote learning platforms due to COVID-19 social distancing policies. Undergraduates in all the 17 faculties in the University of Ibadan were considered.

Multi-stage sampling procedure was adopted to select participants for the study. At the first stage of the sampling, random sampling technique was adopted to select 56% of the faculties excluding the newly ones (Economics and Environmental Science and Design) and the Health Sciences related faculties (Basic Medical, Clinical Sciences, Dentistry, and Public Health because they do much of practical work except in 100 level). At the second stage, four (4) Departments were randomly selected from each of the selected faculties totaling 20 Departments in all. At the last stage, convenience sampling was employed to select 20 undergraduates who received lectures on remote learning platforms, through the assistance of course lecturers to administer the e-format instrument on remote platforms during online interactions at first, and later the printed format when the University resumed the face-to-face mode of classroom interactions. In all, 400 undergraduates participated in the study as presented in Table 3.

**Table 3: Distribution of Faculties, Departments and Undergraduates**

Faculty	Number of Department	Number of Undergraduate
Agriculture	4	20
Arts	4	20
Education	4	20
Science	4	20
Social Sciences	4	20
<b>Total</b>	<b>20</b>	<b>400</b>

Three validated instruments were used to collect information in the study. These are: Depression, Anxiety and Stress Scales ( $r = 0.85$ ), Undergraduates' Socio-Economic Status and Computer Literacy Scale ( $r = 0.75$ ), Attitude to Learning Scale ( $r = 0.70$ ). These instruments were administered on the participants with the assistance of six research assistance, over a period of four weeks.

## Results

**Research Question One: What are the psychological experiences of undergraduates in the University of Ibadan as a result of home stay for learning during COVID-19 pandemic's induced "pedagogical restructuring"?**

**Table 4: Analysis of the Responses on Students' Psychological Experience during COVID - 19 Pandemic Homestay**

Item	All the Time	Most of the Time	Sometimes	Never	Mean	Std. Dev.
I felt downhearted when heard about the suspension conventional classroom activities	207 (51.8%)	67 (16.8%)	57 (14.3%)	69 (17.3%)	3.03	1.16
I felt sad and depressed as a result of learning alone at home	89 (22.3%)	113 (28.3%)	78 (19.5%)	120 (30%)	2.43	1.14
I felt bad that I had nobody to look forward to explain difficult aspect of lesson to me	66 (16.5%)	44 (11.0%)	85 (21.3%)	205 (51.3%)	1.93	1.13
I felt that teaching was meaningless as a result of pedagogical restructuring	100 (25%)	94 (23.5%)	100 (25%)	106 (26.5%)	2.47	1.13
I felt that staying at home wasn't worthwhile	97 (24.3%)	78 (19.5%)	109 (27.3%)	166 (29%)	2.39	1.14
I felt that I had lost interest in just about everything called learning because remote learning does make sense	95 (23.8%)	68 (17%)	79 (19.8%)	158 (39.5%)	2.25	1.21
I was unable to become enthusiastic about anything our lecturer teach us	119 (29.8%)	81 (20.3%)	104 (26%)	96 (24%)	2.56	1.15
I couldn't seem to experience any positive feeling at all during home learning activities	86 (21.5%)	86 (21.5%)	81 (20.3%)	147 (36.8%)	2.28	1.17
I couldn't seem to get any enjoyment out of the things I did when I am on remote learning platform	85 (21.3%)	110 (27.5%)	113 (28.3%)	92 (23%)	2.47	1.07
I just couldn't seem to get going with learning due to cost implication of accessing remote learning	192 (48%)	84 (21%)	65 (16.3%)	59 (14.8%)	3.02	1.11
I found it difficult to work up the initiative to do things due to ineffectiveness of remote learning platform	173 (43.3%)	103 (25.8%)	65 (16.3%)	59 (14.8%)	2.98	1.09
I was aware of the action of my heart in the absence of physical exertion (e.g. sense	144 (36%)	107 (26.8%)	81 (20.3%)	68 (17%)	2.82	1.10

I was aware of the action of my heart in the absence of physical exertion (e.g, sense of heart rate increase when I could not connect to the learning platform	144 (36%)	107 (26.8%)	81 (20.3%)	68 (17%)	2.82	1.10
I was always in a state of nervous tension due to bad internet network during remote learning activities	182 (45.5%)	107 (26.8%)	61 (15.3%)	50 (12.5%)	3.05	1.05
I found myself getting upset rather easily due to lack of expertise in handling remote learning platform	212 (53%)	79 (19.8%)	73 (18.3%)	36 (9%)	3.17	1.02
I found myself getting upset by quite trivial thing as result of adoption of remote for learning	176 (44%)	81 (20.3%)	76 (19%)	67 (16.8%)	2.92	1.14

Table 4 presents the result on the psychological experiences of the sample respondent during COVID-19 pandemic as a result of staying home to learn. The result shows that 52.8% of respondents agreed that they always felt downhearted when they heard about the suspension of conventional classroom activities, 16.8% sometimes felt downhearted, 14.3% rarely while 17.3% never felt so. The result also shows that 22.3% of the respondents always feel sad and depress as a result of learning alone at home, 28.3% sometimes felt the same, 19.3% rarely while 30.0% never done that (Mean=2.43, SD=1.14). Again, 16.5.0% of the sample participants agreed that they always felt bad that they had nobody to look forward to explain difficult aspect of lesson to them, 11.0% sometimes did that, 21.3% rarely done that while 51.3% never done that (Mean=1.93, SD=1.13). More so, 25.0% of the sample participants agreed that they felt that teaching was meaningless as a result of the pedagogical restructuring, 23.5% sometime felt the same, 25.0% rarely felt that teaching was meaningless while 26.50% never felt likewise (Mean=2.47, SD=1.13). Furthermore, 24.3% always felt that staying at home was not worthwhile, 19.5% sometimes felt like that 27.3% rarely felt that way while 29.0% never felt that way (Mean=2.39, SD=1.14).

In the same vein, 40.8% of the undergraduates felt that they had lost interest about everything called learning because remote learning did not make sense while 59.2% did not (Mean=2.2, SD=1.21). Again, 50.1% of the respondents agreed that they were unable to become enthusiastic about anything their lecturers taught them while 49.9% did not (Mean=2.56, SD=1.15). Also, 43.0% of the undergraduates were of the opinion that it could not seem they experience any positive feeling at all during home learning activities while 57.0% did not feel the same (Mean=2.28, SD=1.17). Moreover, 48.8% of the sampled undergraduates were of the opinion that it could not seem that they derived any enjoyment out of the things they did when they were on remote learning platforms while 51.2% the not fell the same (Mean=2.47, SD=1.07). Generally, it could be observed that majority of the respondents had mean anxiety value greater than 2.5, this is an indication the most of the respondent experienced one psychological trauma or the other during COVID-19 pandemic homestay. Therefore, it could be concluded that the level of psychological experiences among undergraduates was high.

**Research Question Two: What is composite contribution of effects of homestay, socio-economic status, and computer literacy on undergraduates learning attitude during COVID-19 induced pedagogical restructuring”?**

**Table 4: Joint Contributions of Undergraduates’ Experience, Socio-economic status, Computer literacy to Attitude to Learning during COVID-19 homestay**

Model Summary						
R .447a						
R Square .050						
Adjusted R Square .043						
Std. Error of the Estimate 4.72343						
		ANOVA				
		Sum of squares	df	Mean Square	F	Sig.
1	Regression	467.540	3	155.847	6.985	.000*
	Residual	8835.057	396	22.311		
	Total	9302.597	399			

Table 4 presents the result on the composite contribution of undergraduates' experience, socio-economic status and computer literacy of the students' learning during COVID-19 pandemic homestay. The result revealed various statistics of regression analysis. The R value of 0.447 is an indication that multiple correlation among independent variables and dependent variables is moderate. The  $R^2 = 0.199$  shows that independent variables accounted for 19.9% of total variance observed in dependent variable (attitude to learning) which implies that independent variables could explain 19.9% of the changes observed in undergraduates' attitude to learning leaving the remaining 80.1% to the other factors that were not consider in the study. ANOVA Table also shows that independent variables are reliable predictors of undergraduates' attitude to learning during COVID-19 pandemic homestay ( $F_{(2, 396)} = 9.470, p < 0.005$ ). Therefore, the three independent variables made significant joint contribution to undergraduate attitude to learning during COVID-19 pandemic homestay.

**Research Question Three: What are the relative contributions of effects of homestay, socio-economic status, and computer literacy on undergraduates' learning attitude during the COVID-19 pandemic's induced “pedagogical restructuring”?**

**Table 5: relative Contribution of Homestay, Socio-economic Background and Computer literacy to Undergraduates’ Learning Attitude during COVID-19 Pandemic**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	21.329	2.059		10.357	.000
Homestay	.675	.212	.159	3.174	.002
Experience	.042	.057	.036	.740	.460
Socio-economic	.156	.041	.191	3.815	.000
Computer Literacy					

Table 5 shows the result of the analysis on the relative contributions undergraduates' experiences, socio-economic status and level of computer literacy to undergraduates' attitude to learning during COVID-19 pandemic homestay. Results revealed that computer literacy made the highest contribution to the students' attitude to learning ( $\beta = 1.91, t = 3.815, p < 0.05$ ) followed by experiences of the undergraduates ( $\beta = .159, t = 3.174, p < 0.05$ ) which were significant and then socio-

economic status ( $\beta = .036$ ,  $t = .740$ ,  $p > 0.05$ ) which was not significant. Inference could be from the result that psychological experience of undergraduates during homestay and their level of computer literacy are valid predictors of undergraduates' attitude to learning during COVID-19 pandemic.

### Discussion of Findings

Tables 4 and 5 also show that joint contribution of experiences of undergraduates during homestay, computer literacy and socio-economic background was significant whereas, among other variables, it was only relative contribution of socio-economic background of the students that was not significant. This result contradicts the findings from other studies on influence socio-economic on students' attitude to learning most especially during COVID-19 pandemic homestay. For instance, Morgan, Farkas, Hillemeier, and Maczuga (2009) examined the effects of socio-economic background on undergraduate learning activities and found that students who come from low-Socio-economic status households develop academic skills slower than those who are from higher SES families (Morgan, Farkas, Hillemeier, and Maczuga, 2009). Bradley, Corwyn, McAdoo, and Garcia Coll, (2001) also conducted similar study and found that primarily poor households have less access to learning materials which promote a positive literacy environment and thereby influence students' attitude to learning. However, these studies did not model psychological experiences and computer literacy skills of their sample into their studies. Hence, the present study revealed that the psychological experiences and computer literacy could confound the effects of socio-economic background on undergraduates' learning attitude most especially in a situation such as COVID-19 pandemic's induced homestay.

### Conclusion and Recommendations

Based on the results of the findings, it could be concluded that it was only psychological experiences and level of computer literacy skills of most undergraduates in the University of Ibadan that influenced their attitude to learning during the homestay. Although the socio-economic status of the sampled undergraduates was moderate, its influence was confounded by the psychological experiences that was prevalent during the homestay and its associate need to relocate teaching-learning activities from the four-walls of classrooms to online platform with students' cutting-edge in computer literacy. Therefore, the findings of the study necessitate the following recommendations

1. Management of the University of Ibadan are encouraged to consider the socio-economic status of undergraduates before advancing into individual differences' sensitive educational event such as adoption of online platforms during COVID-19 pandemic.
2. The University of Ibadan's online platforms (Blended Learning) for teaching-learning process should venture much into improving computer literacy skills on its undergraduates, as this will go a long way to enhance effective teaching-learning activities via online platforms.
3. In the event that psychologically distressing situation such as COVID-19 and or other pandemics occur in the nearest future, psychotherapy (learning motivation) should be designed alongside with the curriculum in order to reduce the bottleneck of psychological strain on undergraduates.
4. The University' management should embrace periodic capacity reinforcements via conferences, workshops, seminars and trainings attendance and participation for both lecturers and undergraduates since the online learning tradition has continued with the emergence of other pandemics such as "Delta variants", "Omicron", etc, after the COVID-19 pandemic.

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